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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,880	05/31/2001	Mats Leijon	203907US6PCT	3481

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EXAMINER

LAM, THANH

ART UNIT PAPER NUMBER

2834

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/763,880

Applicant(s)
Leijon

Examiner
Thanh Lam

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerfast.

Regarding claim 1, Gerfast (figs. 1-7) discloses a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding (26), and a rotor, which, in relation to the stator, rotates with one degree of freedom, which rotor is separated from the stator by an air gap, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides.

Regarding claim 2, Gerfast discloses the cavity is defined by a solid of revolution which diameter at least at the end parts is decreasing.

Regarding claim 3, Gerfast discloses the cavity is defined by a spheroid.

Regarding claim 4, Gerfast discloses the cavity is defined by a sphere.

Regarding claim 5, Gerfast discloses the air gap, in a direction normal to the limiting surface of the cavity, has a uniform thickness.

Regarding claim 6, Gerfast discloses for connection to a power network.

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Regarding claim 7, Gerfast discloses a generator in a conveyance powered by an internal-combustion engine.

Regarding claim 8, Gerfast discloses a prime mover for a conveyance.

Regarding claim 9, Gerfast discloses a prime mover in an electrical domestic appliance.

Regarding claim 10, Gerfast discloses a method for manufacturing a rotating electric machine comprising a stator, which is provided with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, is adapted to rotate with one degree of freedom, which rotor is separated from the stator by an air gap, characterized in arranging a rounded cavity in the stator and having the cavity to surround the rotor at all sides.

Regarding claim 11, Gerfast discloses in forming the cavity to adapt the shape of a mirror symmetrical solid of revolution which diameter at least at the end parts is decreasing.

Regarding claim 12, Gerfast discloses in forming the cavity to be limited by a spheroid.

Regarding claim 13, Gerfast discloses in forming the cavity to be limited by a sphere.

Regarding claim 14, Gerfast discloses a method for manufacturing a rotating electric machine comprising a stator with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom, characterized in the steps of, forming the rotor to be limited by essentially a spheroid, providing a stator core containing a rounded cavity to surround the rotor, and providing the stator core a winding to form a complete stator.

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Regarding claim 15, Gerfast discloses a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom around an axle, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides, that when powered a balanced threedimensionally directed magnetic field operates between the stator and the rotor, and that the magnetic field comprises magnetic vectors, each having an active component parallel to the rotor axle.

Regarding claim 16, Gerfast discloses the sum of all active components parallel with the rotor axle is zero.

Regarding claim 17, Gerfast discloses a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides and that the winding comprises a cable.

Regarding claim 18, Gerfast discloses the cable is a high-voltage cable.

Regarding claim 19, Gerfast discloses for direct connection to a high-voltage network of 36 kV or more.

3. Claims 1,10,14-15,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Claeysen et al.

Regarding claim 1, Claeysen et al. (See figs. 1-26) disclose a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor,

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which, in relation to the stator, rotates with one degree of freedom (col. 4, lines 39-44), which rotor is separated from the stator by an air gap, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides.

Regarding claim 10, Claeyssen et al. (See figs. 1-26) disclose a method for manufacturing a rotating electric machine comprising a stator, which is provided with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, is adapted to rotate with one degree of freedom (col. 4, lines 39-44), which rotor is separated from the stator by an air gap, characterized in arranging a rounded cavity in the stator and having the cavity to surround the rotor at all sides.

Regarding claim 14, Claeyssen et al. (See figs. 1-26) disclose a method for manufacturing a rotating electric machine comprising a stator with a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom (col. 4, lines 39-44), characterized in the steps of, forming the rotor to be limited by essentially a spheroid, providing a stator core containing a rounded cavity to surround the rotor, and providing the stator core a winding to form a complete stator.

Regarding claim 15, Claeyssen et al. (See figs. 1-26) disclose a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom (col. 4, lines 39-44) around an axle, characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides, that when powered a balanced threedimensionally directed magnetic field operates

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between the stator and the rotor, and that the magnetic field comprises magnetic vectors, each having an active component parallel to the rotor axle.

Regarding claim 17, Claeysen et al. (See figs. 1-26) disclose a rotating electric machine comprising a stator, including a core of a magnetizable material and a winding, and a rotor which, in relation to the stator, rotates with one degree of freedom (col. 4, lines 39-44), characterized in that the stator core comprises a rounded cavity surrounding the rotor at all sides and that the winding comprises a cable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

A handwritten signature in black ink, appearing to read 'Thanh Lam', with a stylized, flowing script.

Thanh Lam

Patent Examiner